PROCEDURE SUMMARIES FOR MULTITHREADED SOFTWARE

ABSTRACT

Procedure summaries can be generated and used for multithreaded software. A

5   set of actions for a software procedure can be identified as atomically modelable with

respect to multithreaded execution of the software. Such actions can be considered a

transaction and deemed to have occurred one after another without interruption by other

threads. Thus, multithreaded execution of the software can be modeled to detect

programming flaws. For example, reachability analysis can be used in concert with the

10   procedure summaries to determine if specified invariants fail.